

EXHIBIT 15

DECLARATION OF DAVID F. KOTZ

I, David F. Kotz, declare as follows:

1. I am the Provost at Dartmouth College (“Dartmouth”), located in Hanover, New Hampshire. I have held that position since 2021, and also served as the Associate Dean of the Sciences in the Faculty of Arts and Sciences at Dartmouth from 2009 to 2015. I am also the Pat and John Rosenwald Professor of Computer Science, and a researcher who holds funding from several federal agencies, including the National Science Foundation (“NSF”). I have been on the faculty at Dartmouth since 1991.

2. I have personal knowledge of the contents of this declaration, or have knowledge of the matters based on my review of information and records gathered by Dartmouth personnel, and could testify thereto.

3. In fiscal year 2024, Dartmouth received over \$178 million in external research funding, of which \$137 million was awarded by the federal government.

4. Dartmouth receives substantial annual funding from the NSF. NSF grants already awarded to Dartmouth for the period between 2025 and 2029 total \$55.6 million, including \$18M in indirect costs in accordance with the indirect cost rate that Dartmouth specifically negotiated with the federal government in 2022.

5. Dartmouth intends to apply for new funding awards and for renewals of existing funding awards in the coming years, and indeed such applications will be critical for continuing the work undertaken at our institution.

6. The funding Dartmouth receives from NSF supports critical and cutting-edge research, which is vital to our nation’s security and global competitiveness. Millions of Americans benefit from and depend on this research. For example:

- a. Researchers at Dartmouth's Thayer School of Engineering are funded by NSF for the development of platforms that can deliver both power and data in future high-voltage power systems, a critical technology for a range of next-generation technologies. The results of this research will drive the innovation on which the 21st Century U.S. economy will depend, with broader impacts on a range of modern power and energy systems from renewable energy and electrified transportation to performance computing and communications infrastructure.
 - b. In a completely different context, computer scientists at Dartmouth are using NSF funding to advance our ability to evaluate and predict the cyanobacterial blooms that increasingly threaten the world's freshwater lakes, a crucial source of water for human use. This work will use robotics and big data technologies combined with traditional water sampling methods to unravel the drivers of where, when, and how cyanobacterial blooms develop and spread, leading to more effective intervention to protect human health.
 - c. In other NSF-funded work, Dartmouth engineers are developing an innovative, intelligent surgical probe that would allow a surgeon to check that all cancerous cells are removed during prostate removal surgery. The resulting AI "system-on-chip" for bioimpedance analysis will check the periphery of the tissue being removed, known as surgical margins, for cancerous cells during the surgery. This approach minimizes the chance of disease recurrence, while also minimizing the damage to surrounding healthy tissue.
7. At Dartmouth in particular, NSF funding has contributed to a vital "innovation economy" in rural Northern New England. For example, Dartmouth's participation as a proud

partner of the NSF's Interior Northeast Innovation Corps Hub (IN I-Corps) and the National Innovation Network is aimed at helping entrepreneurial-minded students, faculty, and researchers accelerate research discoveries from the lab to the marketplace by providing a robust entrepreneurial network, training, and support to aspiring innovators and entrepreneurs in predominantly rural and economically underserved regions. The IN-I-Corps hub emphasizes human-centered engineering and science that is a hallmark of Dartmouth and has been a driver of start-up company creation in our region, with the goal of pursuing innovation that truly benefits society and drives economic growth in northern New England.

8. Critically, the cost of carrying out these and other NSF-priority activities is only partially covered by “direct costs” that Dartmouth is allowed to charge to federal grants supporting research. Dartmouth invests significant resources to construct, operate, and maintain purpose-built laboratory facilities, purchase and maintain highly advanced research equipment, and ensure research compliance with numerous federal mandates.

9. By way of example, Dartmouth has invested in and is committed to maintain approximately 820,000 square feet of space for researchers, along with additional space for shared research resources. New investments are made every year to upgrade this space, which is necessary for continuing to advance leading-edge research. For example, in 2022, Dartmouth opened two new research-intensive buildings, including a new Engineering and Computer Science Center (“ECSC”). The ECSC houses several dozen faculty, many of whom are funded by NSF to address areas of critical importance to national, economic and cyber security, including the engineering programs referenced above. These new facilities, which together added 100,000 square feet to Dartmouth’s available research space, represent institutional expenditures of over \$310 million.

10. In addition to Dartmouth's investment in new facilities to support research advances, the institution must also maintain its existing research infrastructure to be able to deliver on federally-funded research. As reported on our most recently completed NSF Survey of Science and Engineering Research Facilities, Dartmouth has spent and/or committed \$31 million of its own funds for the repair and renovation of research facilities for fiscal years 2022 through 2025. These investments have been made specifically in reliance on our ability to recover a significant portion of these expenses through the negotiated indirect costs rate with federal agencies like the NSF.

11. The portion of Dartmouth's investment costs specifically allocable to our federally funded research is reimbursed through negotiated "indirect costs," based on audited cost analyses. These reimbursements are necessary to sustain this critical research infrastructure, without which these research programs would not be possible. NSF's proposal to cut indirect cost rates to 15% would end or seriously jeopardize all the research projects described above by compromising our ability to maintain the facilities and equipment needed to deliver on this work.

12. For example, with respect to the areas of research described above:

- a. Research to develop power and data systems requires the facilities available (thanks to Dartmouth's investment) in laboratory, offices and equipment in the newly opened ECSC, which allowed the integration of engineering and computer science and an extensively equipped robotics lab along with many specialized items of equipment (e.g., electronics, fabrication, and nanotechnology, 3D printers, and file servers).
- b. Dartmouth's research on autonomous surface and unmanned aerial vehicles needed to investigate harmful cyanobacterial blooms was similarly made possible through Dartmouth's investment in the ECSC, including the robotics

lab and equipment noted above, as well as in the purchase of institutional licenses to specialized statistical analysis packages.

- c. Advanced electronic design and fabrication for the proposed system-on-a-chip edge bioimpedance system similarly relies on the advanced materials fabrication and characterization facilities that are included in the ECSC described above.
- d. For all these projects, and many others funded by NSF, the Dartmouth Library also provides resources required to meet growing mandates for open science, and the associated data repositories. It will be impossible to sustain such cutting-edge information services if indirect rates are cut as proposed.
- e. In addition to the specific technical resources and advanced laboratory space mentioned for each NSF-funded project above, these and many other computationally intensive projects at Dartmouth rely on access to computational resources supported by our Research Computing division, including access to our cluster supercomputer “Discovery”, which includes state-of-the-art AI-compatible GPU nodes and data storage available to faculty research projects.

13. Physical facilities costs are one of the largest components of indirect costs. This includes not only the usual costs of constructing and maintaining buildings where research occurs, but the very high costs of outfitting and maintaining specialized laboratory space, which can require special security, advanced HVAC systems, and specialized plumbing, electrical systems and waste management, as well as specialized laboratory equipment. This is particularly true for shared resources, such as the Center for Surgical Innovation, the Electron Microscope Facility, the

Discovery Cluster, the Center for Comparative Medical Research, and the engineering school's Machine Shop. The features and amount of space available to researchers have a direct and obvious impact on the nature and amount of research that can be done at Dartmouth. Many of these shared resources already operate at a substantial loss, and would need to cancel services and reduce staff support if the proposed cuts are allowed to proceed.

14. In addition, indirect costs fund the administration of grant awards, including staff who ensure compliance with a vast number of regulatory mandates from agencies such as NSF. These mandates serve many important functions, including ensuring research integrity; protecting research subjects; properly managing and disposing of chemical and biological agents and other materials used in research; managing specialized procurement and security requirements for sensitive research; managing funds to ensure they are used only for grant-allowable purposes; preventing technologies and other sensitive national security information from being inappropriately accessed by foreign adversaries; providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data; ensuring compliance with specialized security protocols and safety standards; maintaining facility accreditation and equipment calibration to meet research quality and security standards; and preventing financial conflicts of interest.

15. Recovery of Dartmouth's indirect costs is based on predetermined rates that have been contractually negotiated and agreed with the federal government. Direct negotiations and detailed audits with the federal government in 2022 resulted in the setting of a predetermined rate that Dartmouth had expected in good faith would be applicable through 2029. This rate agreement represents the culmination of a lengthy process (as specified by 2 CFR 200 Part 200 Appendix III), which required Dartmouth to provide detailed financial data and schedules in accordance with the

government's standard format and process for rate proposals including cost pool schedules and a reconciliation to Dartmouth's financial statements. The proposal itself was 254 pages and was certified by a senior finance officer and accompanied by audited financial statements. The cognizant audit agency team reviewed the proposal, including spot checks of data and interviews with individual faculty members, in accordance with procedures prescribed by the federal government during a process which took approximately a year.

16. Through fiscal year 2029, the predetermined indirect cost rates range from 63.5% to 64%, with the Facilities components totaling 37.5% to 38% and Administration totaling 26%.

17. The effects of a reduction in the indirect cost rate to 15% would be devastating. Note that Dartmouth's indirect cost recovery is based upon modified total direct costs whereby subcontracts are not eligible for full indirect cost recovery, and equipment and other certain expenses are excluded entirely from indirect cost recovery. In fiscal year 2025, Dartmouth is due to receive an estimated \$18.5 million in NSF funding for direct costs and \$7 million in NSF funding for indirect costs. If—contrary to what Dartmouth has negotiated with and agreed upon by the federal government as little as one year ago—the indirect cost rate were capped at 15% for new awards, that would progressively reduce Dartmouth's anticipated indirect cost recovery across the next four fiscal years, leading to a total loss of \$13.4M.

18. Dartmouth has for decades relied on the payment of indirect costs to offset real institutional expenditures in support of the research that it has committed to perform. Operating budgets rely on an estimate of both direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory compliance, and grant management support), and facility and equipment purchases. And in some cases, Dartmouth has obligations—for example, the cost of faculty

salaries and of stipends for doctoral students for whom a PhD is a long-term commitment—and it relies on budgeted grant funding, including associated indirect cost recovery, to fulfill these commitments. This multi-year budgeting process also assumes the availability or possibility of grant renewals at roughly similar terms – and certainly at the negotiated indirect cost rate – as had been previously available. Under the 15% indirect cost recovery rate cap, Dartmouth’s existing grant funding and budgetary assumptions will be put under severe strain and stretched to the breaking point, and the university would likely not be able to make up the shortfall without substantial cuts to staffing, research program and infrastructure support, and facilities and equipment.

19. Dartmouth has nearly 100 proposals currently pending to NSF that have used our negotiated indirect cost reimbursement rate, and additional proposals are being prepared for submission all the time. For example, the renewal funding proposal for the SuperDARN auroral radar network (which unravels the physics of space weather and its effects on technological systems such as satellites and electrical grids) is currently being reviewed, as is a new application from a professor in Psychology & Brain Sciences to study wearable AI as a means to enhance human performance. Our long-standing stewardship of the NSF nationwide Ice Drilling Program is funded by an NSF grant that expires in October 2025 and will require renewal to sustain continuity of the program.

20. Additional applications are also being planned. For example, Dartmouth is in the process of selecting an application relating to the Established Program to Stimulate Competitive Research (EPSCoR) E-RISE program, supporting the critical NSF mission of promoting nationwide scientific progress by driving long-term improvements in research infrastructure, enhancing R&D capacity, and boosting the research competitiveness of eligible EPSCoR

jurisdictions. The reduction of the previously negotiated indirect cost recovery rate by more than three quarters would need to be factored into our institutional projections now in terms of investments, hiring, etc., and would result in a dramatic restructuring and realignment away from doing research. The proposed cuts would have particularly damaging effects on research that relies on state-of-the-art equipment, including artificial intelligence, quantum computing, robotics, wearables, advanced materials, photonics, electronics, and energy and power technologies.

21. The 15% indirect cost recovery rate cap will make many of these proposed research projects untenable in light of the budgetary cost reallocations among competing research projects. This puts Dartmouth in an impossible position: if we try to use our specifically negotiated indirect cost rate in those proposals, which Dartmouth believes it is entitled to do, we run a serious risk of having our proposals rejected and losing the ability to conduct critical research. If, on the other hand, Dartmouth were to accede to the unilaterally imposed 15% indirect cost recovery rate for its proposals, it would be committing to conduct research based on a financially unsustainable model. Ultimately, the long-term result of the proposed rate cut will be a major reduction in the amount of cutting-edge NSF-funded research at Dartmouth and the associated loss of positive societal benefits.

22. In the short term, facility projects might be canceled, institutional purchases of specialized research equipment would be put on hold indefinitely, and laboratory renovations would pause. Dartmouth would also likely need cut back on the core support facilities and services that we provide to our existing researchers, hampering their ability to do critically important research in an efficient, effective, safe, and secure manner. For example, the funding cuts would jeopardize our ability to fund a 4000 square foot state-of-the-art nanofabrication facility at Dartmouth's Thayer School of Engineering, which is in the early stages of planning and would

serve as a resource for sophisticated faculty research projects, for student training, and also for early-stage advanced manufacturing companies in the region to advance their products towards market and positive societal benefit.

23. In the longer term, investment in the renewal of scientific facilities would stop altogether as a necessary step to absorb the financial impact of this new policy application, and where unreimbursed costs are required to remediate a safety issue or otherwise resolve a compliance concern, the institution would be forced to offset these expenses by effecting cuts in other areas, perhaps by implementing significant layoffs. These decisions would be devastating not only to the Dartmouth community but also to the local economy.

24. The reality of this shortfall and the cuts it would necessitate would reduce the amount available for new faculty “start-up” packages, which are required for junior investigators to set up their laboratories and jump start their own new research programs.

25. Finally, slowdowns or halts in research by Dartmouth and other American universities will allow competitor nations that are maintaining their investments in research to surpass the United States on this front, threatening both our Nation’s national security and its economic dominance. Dartmouth’s NSF funded research that would be put on hold or severely disrupted span the fields of Engineering, Biological Sciences, Anthropology, Chemistry, Computer Science, Earth Sciences, Environmental Studies, Geography, Linguistics, Mathematics, Physics and Astronomy, Psychology and Brain and Sciences. The world’s best scientists will not move to (or stay at) universities where they are not able to conduct world-class research.

26. It is notable that while Dartmouth is fortunate to have a significant endowment, we are not able to make up the difference in operating budget that this massive reduction in indirect-cost support would create by either increasing the endowment distribution or invading endowment

principal. The purpose of the endowment is to provide maximum sustainable financial support to Dartmouth to serve its mission in perpetuity. Core to the endowment's purpose is balancing the interests of current and future generations of Dartmouth students. Maintaining the inflation-adjusted value of the endowment underpins this concept of intergenerational equity.

27. Dartmouth's endowment consists of nearly 6,700 individual funds, each with specific agreements and restrictions. Of Dartmouth's total endowment, 78% is restricted to specific programs and uses and is therefore unavailable to fund a general operating shortfall.

28. The unrestricted portion of Dartmouth's endowment is already committed to support a variety of initiatives including financial aid, student experience, professorships, infrastructure, and enabling support for other areas of the institution, including the support of unrecoverable costs in support of federally funded research. These institutional investments already substantially subsidize the federal investment in the direct and indirect costs of research awards. It is also not possible to simply increase the endowment distribution rate because it is limited by standards of prudence under the New Hampshire Uniform Prudential Management of Institutional Funds Act (UPMIFA) and subject to the active oversight of the Charitable Trusts Unit of the State Attorney General's Office.

29. And even if it were consistent with standards of prudential management, increasing the spend of unrestricted money from Dartmouth's endowment would very quickly cripple the institution's ability to fulfill its overall mission, leaving Dartmouth with only restricted funding and no flexibility to allocate resources to research or other unfunded core academic initiatives.

30. If Dartmouth can no longer apply for NSF grants because it is unable to accept the new indirect cost rate cap – a risk that would impact 95% of our NSF grants – the harms described herein would be exacerbated. That greater loss in funding from NSF would mean more significant

cost-cutting measures would need to be adopted—and quickly. Dartmouth cannot “float” all of the indirect costs it would likely lose coverage for – nor could it float NSF grants altogether if it is not able to accept the 15% cap – so some research projects would need to be terminated altogether, and others would need to be scaled down or pared back significantly. The process of identifying these cuts would need to begin immediately, and layoffs, closures, and research pauses or contractions would follow soon thereafter. Cutting back on Dartmouth’s research in fields as referenced above will also have long-term implications on national security and the American economy.

31. In sum, NSF’s actions to limit Dartmouth’s recovery of the very real and highly significant investments it has made and will continue to be required to support its research infrastructure through the failure to apply the previously negotiated indirect costs recovery rate to renewals and new funding awards will have adverse impacts not only on the institution but on our local community, northern New England, and the national scientific and innovation ecosystem.

32. I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 7, 2025, at Hanover, NH.

A handwritten signature in black ink, appearing to read "David F. Kotz". It is written in a cursive style with a horizontal line underneath it.

David F. Kotz